

Different percentages of crude protein and oat flour content will present different textures of pasta noodle. If the crude protein is less than 6%, as stated, the texture is loose and soft, and not acceptable. Preferably, if the amount of crude protein is 14-18%, the texture has been found to be optimal. Of course, durum wheat and semolina may be used in conjunction with the subject invention to conform to various desired tastes and effects, and still remain within the scope of the subject invention.

In a health food application, 75% oat flour may be required. Therefore, at least 20% wheat gluten flour is required to provide the necessary structure and texture to the pasta noodle.

Curdlan gum may be used as an additive in the dry flour composition of the present invention to provide more structure to the pasta noodle. Curdlan gum is a natural polysaccharide (β -1, 3-glucan) produced by pure culture fermentation from the bacterium *Alcaligenes faecalis* var. *Myxogenes*. Curdlan gum is a moderate molecular weight (DP-450) unbranched linear 1 \rightarrow 3 β -D glucan (molecular weight \sim 100K) with no side chains. Curdlan gum can be added alone, or together with gluten protein flour, to the dry flour composition as an ingredient for providing the net-like structure for the dough. Curdlan gum is usually used in food processing as a gelling agent and produces a weak low-set gel if heated to 60°C and then cooled to below 40°C. However, if the temperature is greater than 80°C, Curdlan gum may produce a stronger thermo-irreversible gel. Since pasta noodles are usually required to be cooked at a temperature higher than 80°C and subsequently cooled, the pasta noodle may exhibit different characteristics at different temperatures.

The amount of oats utilized can be increased with the use of a proper amount of Curdlan gum in the oat-containing flour composition. The elasticity of the pasta noodle can be improved by such addition, and the stickiness of the pasta noodle can be decreased as well. When Curdlan gum is added along with a wheat gluten protein, the amount of Curdlan gum is 0.1 to 1.5% by weight based on the total weight of the dry flour composition. When Curdlan gum is added alone without the use of a wheat gluten protein, the amount of Curdlan gum is 7.5 to 15% by weight based on the total weight of the dry flour composition.

Furthermore, since about 20% of the water soluble and salt soluble protein is contained in the hard or soft wheat flour, salt can be added to the flour composition along with water for further enhancing the formation of the net-like structure of the dough. The amount of the salt is generally less than 2% by weight, preferably less than 1.5% by weight, and more preferably 0.1 to 1.5% by weight, based on the total weight of the dry flour